

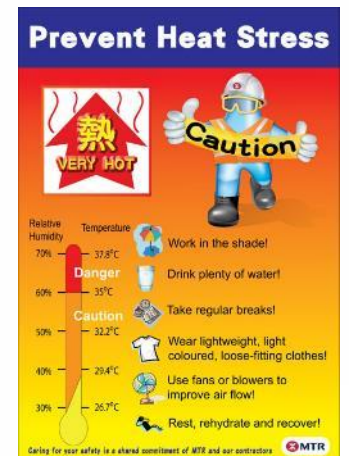


Heat Stress Prevention Campaign from a Client Perspective

Rico Lai

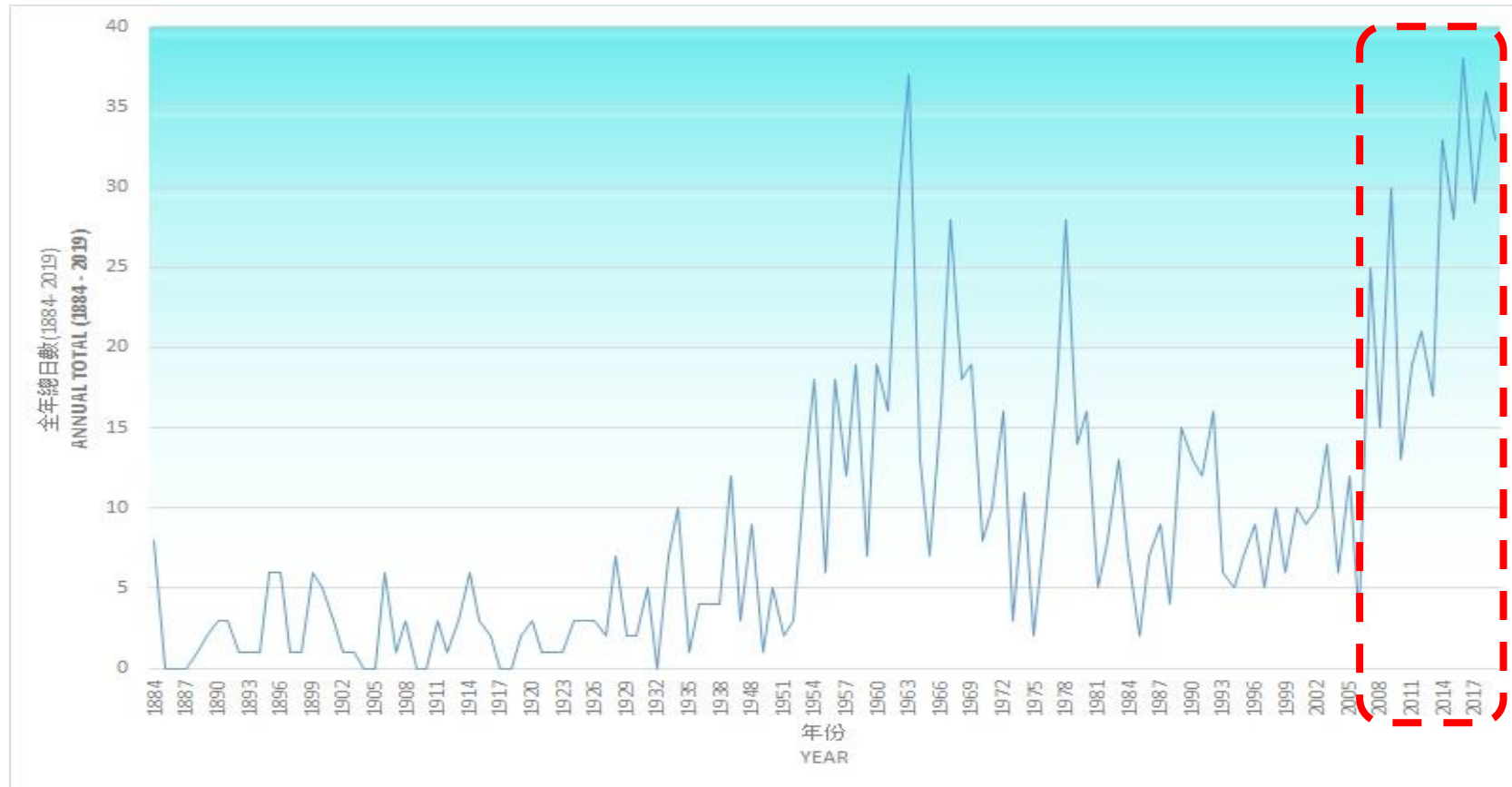
Manager – Project Safety

23 April 2020



Background

- Heat Stress is a major health hazard in HK during summer.
- The situation becomes more challenging due to the increasing trend of “very hot days” since 2007!





地盤51度 熱過焗爐

酷熱天氣搵命博



Key Basis

- For the construction industry, official bodies (LD, CIC, OSHC, etc) have published guidelines to all stakeholders.
- The guidelines serve as a key basis to manage the heat stress risk.
- And it's requires commitment to drive it forward!



MTR Safety-First Culture

Being a major client in HK infrastructures development, we do:

- Take the safety of our customers, the public, contractors and employees an absolute prerequisite and utmost concern.
- Committed consistently to :
 - meeting statutory requirements,
 - maintaining and improving a safety-first culture, and
 - implementing management system to the achievement of our safety goals.



Our perspectives

- Work together with our Contractors and listen to workers
- Incorporate “hot weather provisions” in contract
- Provide support to the Contractors.

New Railway Projects

Since the start of new railway projects from 2009 (i.e. WIL, SIL), MTR Projects Division has incorporated “Hot Weather Provisions” in contract requirements.

Our General Specification mandates the contractors’ compliance with:

- Labour Department’s *“Prevention of Heat Stroke at Work in a Hot Environment”*, and
- Precautionary measures such as:
 - heat stress risk assessment,
 - safety helmet with ventilation slots,
 - lightweight & light colour clothing,
 - compulsory rest breaks,
 - air-conditioner in plant cabins.



New Railway Projects

As increasing concern of heat stress, MTR Projects Division issued the *Heat Stress Prevention Guidelines* in 2012, which includes:

- To comply with CIC's *"Guideline on Site Safety Measures for Working in Hot Weather"*
- To provide 15-minute rest break after every 90 minutes of continuous work
- To conduct specific heat stress risk assessment, based on site condition and work procedures



Hot Weather Provisions

- Sufficient drinking water with dispensers



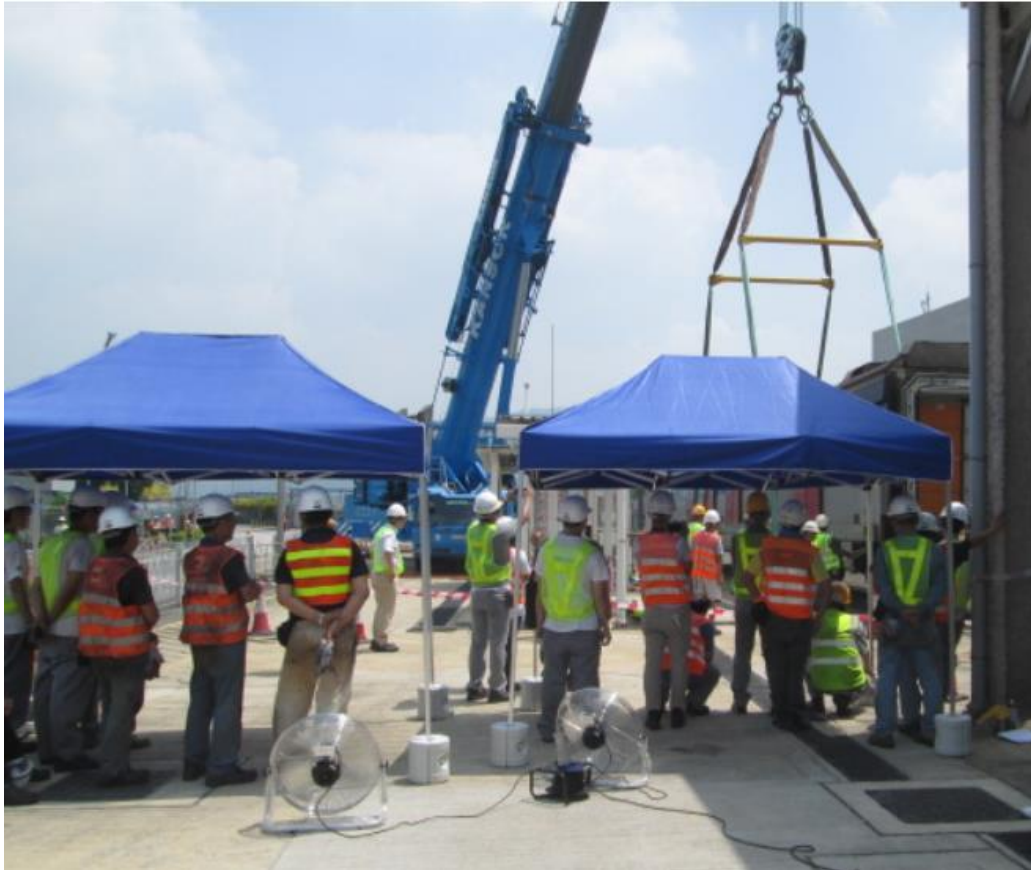
Hot Weather Provisions

- Sheltered rest areas with seats, fans & drinking water



Hot Weather Provisions

- Sheltered working area



Hot Weather Provisions

- Improve ventilation at workplace



Hot Weather Provisions

- Health screening for new workers by site nurse & regular body temperature checks for at-risk workers.
- Information & training to enhance heat stress awareness of workers.



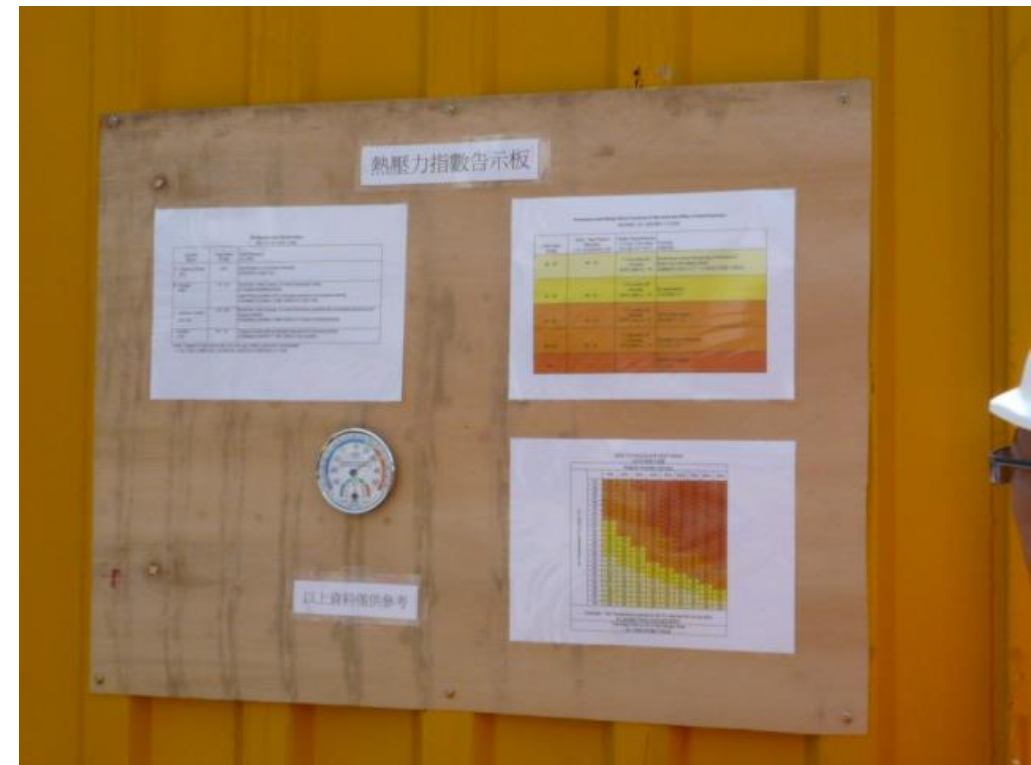
Promotion

- Banners provided to Contractors
- Pocket cards provided to workers



Promotion

- Contractors' heat stress information board



Joint Monitoring and Assessment

Heat Stress Assessment Checklist



Section I

Name of organization / Department: MTRC

Work Location: Finger Pier

No. of Inspectors and work description: SIOW x 1 and IOW x 2 for Supervision

Section II

	Risk Factor	Yes	No	Photo
1	Temperature			
	Is the workplace located outdoor?	✓		
	Is the workplace directly affected by the temperature of the outdoor environment?	✓		
	Does the temperature of the workplace generally exceed 32°C?	✓		
	Does the air in the workplace feel hot?		✓	
2	Humidity			
	Is the workplace directly affected by the humidity of the Outdoor environment?	✓		
	Does the relative humidity of the workplace generally exceed 85%?		✓	
	Is there any source/ equipment that produces steam?		✓	
	Is the skin of the Inspectors completely wet?		✓	

Heat Stress Assessment Checklist

Section I



Name of organization / Department: MTRC/SCL - 1109

Work Location: SIOW Station and TKA above ground

No of Inspectors & engineers and work description: 11 Inspectors and 7 engineers for Supervision (for SIOW station and tunnels)

Section II

Assessment Date: 1-6-2018, Time: 2:00 to 3:00 p.m.
The very hot weather warning was in force, 28°C to 35°C

SIOW above ground		
		
Risk Factors	Findings	Control measures for risk factor
1. Temperature	<ul style="list-style-type: none"> i. The workplace is located outdoor. ii. The workplace is directly affected by the temperature of outdoor environment. iii. The temperature of the workplace generally exceeds 32°C. iv. The air in the workplace feels hot. 	<ul style="list-style-type: none"> Resting area (with shelter and drinking water facilities) was provided near Entrance A & D respectively at SIOW above ground. 
2. Humidity	<ul style="list-style-type: none"> i. The workplace is directly affected by the humidity of the outdoor environment. ii. The relative humidity of the workplace is 65%. iii. There is not any source / equipment that produce steam. iv. The skin is not completely wet. 	



Good Initiatives

- Distribute water bottle and electrolyte drink powder



Good Initiatives

- Water spray at site and placing ice in tunnel to lower the temperature of the working environment.



Good Initiatives

- Provide ice making machines



Good Initiatives

- Distribute neck shade for safety helmet





Thank
You